

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------------|--|----------------------|---------------------|------------------|--|
| 10/767,738 | 01/30/2004 | Dan Iwata | 00684.003579 | 5732 | |
| 5514 7 | 590 12/15/2005 | | EXAM | EXAMINER | |
| FITZPATRICK CELLA HARPER & SCINTO | | | UHLENHAKE, JASON S | | |
| •••• | KEFELLER PLAZA ORK, NY 10112 ART UNIT PAPER | | PAPER NUMBER | | |
| 112W TORK, | 111 10112 | | 2853 | | |

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
|--|---|---|----------------|
| | 10/767,738 | IWATA, DAN | |
| Office Action Summary | Examiner | Art Unit | |
| | Jason Uhlenhake | 2853 | |
| The MAILING DATE of this communication ap Period for Reply | opears on the cover sheet with | the correspondence addres | is |
| A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [- Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICA .136(a). In no event, however, may a repl d will apply and will expire SIX (6) MONTH te, cause the application to become ABAN | ATION. y be timely filed IS from the mailing date of this commu | |
| Status | | | |
| 1) Responsive to communication(s) filed on | · | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Th | is action is non-final. | | |
| 3) Since this application is in condition for allow | ance except for formal matter | s, prosecution as to the me | rits is |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D. 1 | 11, 453 O.G. 213. | |
| Disposition of Claims | | | |
| 4) Claim(s) 1-20 is/are pending in the application | n. | | |
| 4a) Of the above claim(s) is/are withdra | awn from consideration. | | ` |
| 5) Claim(s) is/are allowed. | | | |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected. | | | |
| 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction and/ | or election requirement. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Examin | ner. | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ ac | cepted or b) objected to by | the Examiner. | |
| Applicant may not request that any objection to the | e drawing(s) be held in abeyance | e. See 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) including the corre | , | • | |
| 11) ☐ The oath or declaration is objected to by the E | Examiner. Note the attached (| Office Action or form PTO-1 | 52 . |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreig | n priority under 35 U.S.C. § 1 | 19(a)-(d) or (f). | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | -t- h hid | | |
| 1. Certified copies of the priority documer | | diantian No. | |
| 2. Certified copies of the priority documer3. Copies of the certified copies of the priority | | | 70 |
| application from the International Burea | | ceived in this National State | J C |
| * See the attached detailed Office action for a lis | | ceived. | |
| | | | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Sun | nmary (PTO-413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/I | Mail Date | . |
| Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | 8) 5) Notice of Info 6) Other: | rmal Patent Application (PTO-152 | 9 |

Application/Control Number: 10/767,738

Art Unit: 2853

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 4 – 15, and 18 - 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Nunokawa (U.S. Pub. 2003/0174180).

Nunokawa discloses:

- **regarding claim 1,** a control means for determining a kind of device among a plurality of kinds in response to a predetermined operation for setting the kind of printing apparatus, and operable for the kind determined (Abstract, Paragraphs 0067, 0160, 0180 0183)
- discrimination means for discriminating whether the kind of device is determined or not (Paragraphs 0082 0084)
- a communication control means for controlling communication with the information processing apparatus by the communicating means in accordance with result of said discrimination means (Paragraphs 0084 0086)
- **regarding claim 4,** control means determines the kind of device of the printing apparatus by read information relating to kinds of devices out of memory provided in the recording head in response to an operation of mounting the recording head to the printing apparatus (Paragraphs 0013, 0078 0081)

Application/Control Number: 10/767,738 Page 3

Art Unit: 2853

- **regarding claim 5,** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013)

- control means determines kind of printing apparatus by reading information of the kind of device stored in memory which is provided in the ink container mounted to said ink container mounting portion (Paragraphs 0072 0074)
- **regarding claim 6,** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 0013)
- control means checks correspondence between information on kind of device read out of head memory provided in a recording head mounted (Paragraph 0164) and information on the kind of device read out of container memory provided in the ink container mounted to the ink container mounting portion (Paragraph 0155), and determines the kind when the kinds are discriminated as corresponding to each other (Paragraphs 0111 0112, 0189 0190).
- **regarding claim 7,** discrimination means for discriminating a kind of recording head mounted to said apparatus, where in sad control means determines the kind of device of said printing apparatus in accordance with a kind of the recording head mounted (Paragraphs 0078 0083).

Application/Control Number: 10/767,738 Page 4

Art Unit: 2853

- **regarding claim 8,** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013), and container discrimination means for discriminating a kind of said ink container (Paragraphs 0072 – 0073)

- control means determine kind of said printing apparatus on basis of result of discrimination of said recording head by said discrimination means (Paragraphs 0078 0079) and a result of discrimination of a kind of said ink container (Paragraphs 0072 0073) by said container discrimination means (Paragraphs 0081 0083, 0160)
- **regarding claim 9,** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 0013), and container discrimination means for discriminating a kind of said ink container mounted to the apparatus (Paragraphs 0072 0073)
- wherein said control means determines a kind of said printing apparatus in accordance with a kind of said ink container mounted thereto (Paragraphs 0072 0074, 0081 0083)
- regarding claim 10, storing means for storing setting information
 corresponding to kinds of devices with which said printing apparatus compatible, control
 means reads the setting information corresponding to the determined kind of device out

Application/Control Number: 10/767,738

Art Unit: 2853

of said storing means and controls said printing apparatus to operate the kind of device

Page 5

determined in accordance with the setting information (Paragraphs 0006, 0111).

- **regarding claim 11,** storing means for storing information on the determined kind of device, wherein said discrimination means discriminates non-determination of the kind of device when said storing means does not have the information on the kind of device (Paragraphs 0193 – 0194)

- **regarding claim 12,** control means discriminates whether operations for setting the kind of device are in conformity with each other or not, and determines the kind of device of said printing apparatus when a result of discrimination is affirmative (Paragraphs 0006, 0111)
- **regarding claim 13,** control means effects starting process within a range discriminatable (Paragraph 0111) by said discrimination means in the starting process upon actuation of a main switch of said printing apparatus (Paragraph 0143 0144), after the discrimination of said discrimination means, said control means controls the apparatus so as to carry out another starting process (Paragraphs 0067, 0098, 0193)
- **regarding claim 14,** control means does not effect a starting process for communication means in a starting process upon actuation of the main switch of said printing apparatus, and after discrimination means of said printing apparatus is determined or not, said control means controls the apparatus so as to carry out the starting process for said communicating means (Paragraph 0193)
- **regarding claim 15,** control method for printing apparatus including communicating means for communication with an information processing apparatus

Page 6

(Paragraphs 0085 – 0086), comprising: a step of determining a kind of device among a plurality of kinds in response to a predetermined operation for setting the kind of the printing apparatus, and operable for the kind thus determined (Abstract, Paragraphs 0067, 0160, 0180 - 0183)

- step of discrimination whether the kind of device is determined or not (Paragraphs 0082 0084)
- control step of controlling said apparatus in accordance with the determined kind of device, and controlling the communication of said communicating means with an information processing apparatus, when a result of the discrimination is affirmative (Paragraphs 0086 0090)
- **regarding claim 18,** determining step determines the kind of device of said printing apparatus on the basis of information obtained from the recording head mounted thereto (Paragraphs 78 83)
- **regarding claim 19,** wherein said recording head effects the recording by ejecting ink (Paragraph 0012), and wherein said determining step determines the kind of device of said printing apparatus on the basis of information obtained from the ink container mounted when said ink container containing the ink to be supplied to said recording head is mounted (Paragraphs 0072 0074)
- **regarding claim 20,** wherein said recording head effects recording by ejecting ink (Paragraph 0012), and an ink container containing the ink to be supplied to said recording head is mountable to said printing apparatus (Paragraph 0013), said determining step determines said printing apparatus when information obtained from

Art Unit: 2853

said recording head mounted thereto and information obtained from the ink container mounted thereto correspond to each other (Paragraphs 0111 - 0112).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 3, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nunokawa (U.S. Pub. 2003/0174180) in view of Edelen et al (U.S. Pat. 6,568,785).

Nunokawa discloses all of the claimed limitations except for the following:

- regarding claims 2 and 16, when the result of a discrimination is negative, communication control means effects control so as not to respond to a command inquiring information on the kind of device received from the information processing apparatus
- **regarding claims 3 and 17,** when the result of the discrimination is negative, said communication control means effects control so as to prevent communicating operation by said communicating means

Edelen et al discloses:

- **regarding claims 2 and 16,** when the result of a discrimination is negative, communication control means effects control so as not to respond to a

Application/Control Number: 10/767,738 Page 8

Art Unit: 2853

command inquiring information on the kind of device received from the information processing apparatus (Column 6, Lines 33 – 55). For the purpose of providing identification of print heads installed in ink jet printers.

- regarding claims 3 and 17, when the result of the discrimination is negative, said communication control means effects control so as to prevent communicating operation by said communicating means (Column 6, Lines 33 – 55). For the purpose of providing identification of print heads installed in ink jet printers.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teach of when the result of a discrimination is negative, communication control means effects control so as not to respond to a command inquiring information on the kind of device received from the information processing apparatus; when the result of the discrimination is negative, said communication control means effects control so as to prevent communicating operation by said communicating means as taught by Edelen et al into the device of Nunokawa. The motivation for doing so would have been to provide identification of print heads installed in ink jet printers.

Art Unit: 2853

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSU

Jun Whate November 17, 2005

Page 9